

## Workplan for Use of Section 106 Monitoring Initiative FY 2016 Funds

### Part A. Implementation of Monitoring Strategies

Please identify how your State plans to use the FY 16 Monitoring Initiative Strategy Implementation funds. It is important to keep in mind that these funds should be used for new, expanded or enhanced monitoring activities that will build upon the State's base monitoring programs as described in the State's Monitoring Strategy. In addition to the table below States must submit a 1-2 page narrative workplan that describes in more detail the tasks listed including how the activity links to the State's monitoring strategy in terms of which gap, deficiency, timeline element, etc. is being addressed.

Some examples of program enhancement include:

- Adoption of statistically valid monitoring designs and assessment methodologies to expand coverage of waters and assessments
- Migration to Water Quality Exchange for data sharing and uploading of ambient monitoring data to national STORET warehouse
- Expansion of the use and rigor of biological monitoring and the development of improved assessment, stressor identification, and reporting tools
- Development of new tools such as predictive technology and remote sensing to refine applications of monitoring data

Task/Description of Activity	Products and/or Deliverables (outputs)	Environmental Outcomes (related to EPA Strategic Plan)	2016 Expected Cost	Planned Completion Date	Identify how this task links to Monitoring Strategy (which gap, weakness, timeline element does this task address?)	National Database e.g., STORET, ATTAINS, other	Additional Information
<b>Task #1:</b> Collect and analyze bacteriological samples to determine recreational use attainment status. Work with citizen volunteer monitors to coordinate the collection of at least 2 sets of 5-day geometric means of fecal coliform bacteria densities in a 30-day period. Conduct analysis on split samples for fecal coliforms and E. coli to develop potential new recreational use criteria.	Geometric means and maximums from the 2 sets of samples will be compared to criteria for recreational use assessments. The assessment results will be reported in the Integrated Water Quality Monitoring and Assessment Report (Integrated Report).	Assessments of recreational use	\$ 35,000.00	Dec. 31, 2016	Will increase the total stream miles assessed for recreational use.	Assessment results will be entered into the state assessment database which can be transferred to EPA. Information is also reported in the Integrated Report.	Funds will be used to cover accredited independent laboratory cost, lease of 5 cars. Local laboratories must be used due to short holding time of samples.

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<b>Task #2:</b> Provide funding to train multiple staff at numerous meetings and workshops that improve staff proficiency in water quality monitoring activities, watershed modeling, statistical analysis and use of geographic information systems. Provide funding for travel costs for recreational use assessment and other surface water monitoring activities.	Enhanced communication between staff located throughout the Commonwealth will prevent duplication of effort and identify monitoring and assessment needs that should be addressed. Staff attendance at national meetings will improve state efforts to meet national goals and improve state proficiency with water quality monitoring and assessment.	More effective monitoring and assessment that will produce cost savings by reducing duplication of efforts.	\$ 15,000.00	Dec. 31, 2016		Not Applicable	Most of funding will be used to pay for staff travel costs associated with the recreational use monitoring.
<b>Task #3:</b> Purchase new and replacement equipment and supplies expended during normal sampling operations supporting statewide monitoring conducted for use attainment reporting in accordance with CWA Sections 303(d) and 305(b).	Ethanol, D-frame nets, forceps, field meters, buffer solutions, sample bottles, VOA vials, taxonomic keys, and other equipment and supplies.	Allow for continued monitoring and assessment of all protected water uses attainment status.	\$ 10,000.00	Dec. 31, 2016		Not Applicable	
<b>Task #4:</b> Conduct continued study of Susquehanna River to determine attainment status of all designated uses. The study includes monitoring of major tributaries as well as existing and new locations on the mainstem. Monitoring will include use of data loggers for DO, pH, Temperature and Conductance; macroinvertebrates; fish; mussels; algae and nutrients and develop monitoring program for recreational use specific to large waterbodies. Also includes project to determine Thiamine levels in eggs and Thiaminase activity in invasive species.	Assessment results generated from the survey will be reported in the 2018 and future Integrated Reports.	Allow for continued monitoring and assessment of all protected water uses attainment status.	\$ 100,000.00	Dec. 31, 2016		Assessment results will be entered into the state assessment database which can be transferred to EPA. Information is also reported in the Integrated Report.	A portion of funds will be used to purchase supplies, equipment and replacement parts needed for the Susquehanna River aquatic life assessment. The remaining portion of funds will be used to conduct analysis on algal species identification and biofilm fatty acid composition. Support contracting with outside laboratory to conduct analysis on biofilm fatty acid samples. This study remains a priority project which requires more resources in both money and personnel.

\$ 160,000.00

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State currently has and will continue to implement state-scale statistical surveys - Y/N. If no, please explain